



Safe Routes to School

Improves the Built Environment





Introduction

Since the 1950's the United States has been planning and developing its communities and transportation infrastructure around suburban living and the speed and convenience of the automobile. This has resulted in sprawl, congestion, and a built environment that is largely inconvenient, inaccessible or unsafe for active transportation such as walking and bicycling. Because of this, rates of walking and bicycling are generally very low, except in dense neighborhoods built on a grid pattern, and in mixed-use areas where schools, businesses and public facilities are located within close proximity of residential areas.¹

The most vulnerable populations, including children, the elderly and those with special needs, have been functionally shut out of the transportation and land use infrastructure, and have become dependant upon the automobile, or have simply become less active because they cannot move around their communities without a great deal of effort and personal risk.

In addition, much fewer U.S. children walk or bicycle to school than did so a generation ago. In 1969, approximately half of students walked or bicycled to school, and within one mile of schools, 87 percent of children walked or bicycled.² But by 2001, only 15 percent of students between the ages of 5 and 15 walked or bicycled to or from school.³

Safe Routes to School (SRTS) programs have sprung up in many communities throughout the U.S. in an attempt to make walking and bicycling conditions safer, more accessible, and more convenient for children and their families. Walking or bicycling to school gives children time for physical activity and a sense of responsibility and independence; allows them to enjoy being outside; and provides them with time to socialize with their parents and friends, and to get to know their neighborhoods. SRTS is one part of the overall solution to improving traffic safety and building an active, livable community.

SRTS programs combine evaluation, education, encouragement, engineering and enforcement, and are typically led by parents, teachers, students, government agencies, elected officials and other community members. Benefits of SRTS programs can



include reduced traffic congestion; improved safety, air quality and community livability; and improved health –an important consideration now that more than 33 percent of U.S. children and youth are considered obese or overweight.⁴

In 2005, Congress created a \$612 million federal SRTS program as part of its transportation bill – SAFETEA-LU – which is funding and inspiring the launch of SRTS programs in all fifty states and the District of Columbia. The program dedicates a total of \$612 million towards SRTS from fiscal years 2005 through 2009 to substantially improve the ability of primary and middle school students to walk and bicycle to schools safely. These funds are distributed to state Departments of Transportation based on student enrollment, with no state receiving less than \$1 million per year.

The goals of the federal SRTS program are:

1. to enable and encourage children, including those with disabilities, to walk and bicycle to school
2. to make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age; and
3. to facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity (approximately 2 miles) of primary and middle schools (Grades K-8).

¹ Ewing, Reid; Pendall, Rolf; Chen, Don *Measuring Sprawl and Its Impact Smart Growth America* 2002

² *Transportation Characteristics of School Children*, Report No. 4. Washington, DC: *Nationwide Personal Transportation Study*, Federal Highway Administration, July 1972. Available at: www.fhwa.dot.gov/ohim/1969/q.pdf

³ *Travel and Environmental Implications of School Siting*. U.S. Environmental Protection Agency, 231-R-03-004: 2003. Available at: www.epa.gov/livability/school_travel.htm

⁴ "Obesity Still a Major Problem." National Center for Health Statistics, Centers for Disease Control and Prevention, 14 April 2006. Available at www.cdc.gov/nchs/pressroom/06facts/obesity03_04.htm.

Safe Routes to School



Each state administers its own program and develops its own procedures to solicit and select projects for funding. The program establishes two distinct types of funding opportunities: infrastructure projects (engineering improvements) and non-infrastructure related activities (such as education, enforcement and encouragement programs). The legislation also requires each state to retain a full-time Safe Routes to School Coordinator to serve as a central point of contact for the state.

As of September 2008, every state has launched its SRTS program, and thousands of applications for funding from communities throughout the U.S. have been awarded funds for infrastructure improvements near schools. However, while states have awarded 80 percent of the available funding from fiscal years 2005 through 2008, very few projects have been completed to date. This is due to the complexity of setting up a state program, administering grants to local communities, and the time involved with designing and building projects that adhere to multiple federal and state regulatory standards.

Federally-funded SRTS infrastructure projects must be within two miles of the eligible school, and must adhere to all federal and state regulations. Not less than 70 percent and not more than 90 percent of a state's available funds are to be spent on infrastructure projects; the remaining 10-30 percent is to be

spent on non-infrastructure activities. Most states have set an upper limit on the size and scope of a school's infrastructure project of between \$100,000 and \$250,000, and many states also require that the project be part of a comprehensive program or plan that includes non-infrastructure activities. Typically a city or county authority will be the primary applicant, with school districts and nonprofit groups as partners.

SRTS projects often include multiple engineering 'fixes' such as multi-use paths, improvements to intersections and street crossings, sidewalks, traffic calming techniques, bicycle-parking facilities on school grounds, and improved signage and traffic flow around the school. SRTS projects can also include very small maintenance improvements, typically paid with local funds, such as trimming bushes near corners, re-painting curbs and crosswalk striping.

The federal SRTS program is also inspiring complementary programs such as complete streets, which includes bicycling, walking, mass transit and disabled access in all road projects, and is leading to changes in the built environment and the way communities plan and develop their transportation and land use infrastructure. Bicycling and walking are becoming legitimate forms of transportation in many communities, thanks in part to Safe Routes to School.





What follows are case studies describing how 10 states are awarding their SRTS federal funds to support improved infrastructure such as sidewalks, bike lanes, pathways, improved intersections, traffic calming, bike racks, and more.

CALIFORNIA

California's 2005-2009 SRTS federal funding total: \$67,533,954.

The California Department of Transportation completed their Cycle 1 call for federal projects (encompassing years 2005 through 2008 of the federal funding) in fall 2006 and announced selected projects in June 2007 with \$44,800,000 available. The Cycle 2 final call for federal grant applications was announced on April 25, 2008 with \$46,000,000 available and an application submittal deadline of July 18, 2008.

Results were announced on International Walk to School Day, October 8, 2008 with 401 applications submitted requesting a total of \$191,000,000; 121 applications were selected for the available funds, meaning that only one in every four projects was funded. In California, seventy percent of the federal funding supports infrastructure investment, with the remaining 30 percent supporting a statewide Safe Routes to School Resource Center, and non-infrastructure activities that focus on education, encouragement and enforcement.

State SR2S Funds

In addition to federal funding, the State of California has had a state-legislated Safe Routes to School (SR2S) program since the year 2000. A call for Cycle 8 SR2S applications is expected to be announced by the end of 2008 with an anticipated \$24,250,000. A call for projects in Cycle 7 of the state-legislated SR2S program (included FY 2006-07 and 2007-08) was announced in August 2007. A total of 489 applications requesting a total of \$206,462,813 were received for the \$52,000,000 available; 139 of the applications were funded. The state SR2S program funds infrastructure projects, with the opportunity for 10 percent of the project total to support non-infrastructure activities.

DC

DC's 2005-2009 SRTS federal funding total: \$4,990,000.

DC's SRTS pilot program finished its application process in the summer of 2008; 13 schools from each of the city's eight Wards were selected for funding. Beginning in the fall of 2008, the District Department of Transportation began assisting each selected school in the development of a SRTS Plan that includes infrastructure and non-infrastructure projects and programs.



GEORGIA

Georgia's 2005-2009 SRTS federal funding total: \$17,177,280.

On October 13, 2008, the Georgia Department of Transportation's SRTS program released its first call for infrastructure projects. The infrastructure portion of the program, which consists of projects such as crosswalks, sidewalks, and traffic calming devices, will be implemented through a statewide engineering consulting firm. As of October 2008 the Department had completed negotiations for this contract with the selected firm and the contract had begun. The Department hopes that hiring one statewide firm to implement all infrastructure projects will reduce costs and speed-up project delivery, since it removes the burden of managing federal and state regulations from local communities.

ILLINOIS

Illinois' 2005-2009 SRTS federal funding total: \$23,279,528.

On March 6, 2008, The Illinois Department of Transportation announced \$8,300,000 in funding awards for 112 projects; in this first call for applications IDOT received 298 applications that included 1,042 projects totaling \$77,700,000, meaning that only one in nine applications could be funded. A School Travel Plan is required prior to applying for Illinois SRTS funds. Applicants must use the online Illinois School Travel Plan planning tool, accessible through the Illinois SRTS web site, to create their personalized school plans. The second call for federal grant applications opened on August 1, 2008 with a deadline of December 1, 2008.



KENTUCKY

Kentucky's 2005-2009 SRTS federal funding total: \$7,882,559.

Applications are accepted by the Kentucky Transportation Cabinet each year from January 1 through March 15. The third call for applications will take place in January 2009 with grant awards planned to be announced in June 2009. Kentucky does not have separate guidelines for infrastructure and non-infrastructure grants, funded projects can include both elements.

LOUISIANA

Louisiana's 2005-2009 SRTS federal funding total: \$9,009,591.

The first application period was opened by the Louisiana Department of Transportation and Development in January 2008 with a deadline of February 29, 2008. The Department awarded \$1,888,759 for infrastructure projects and \$290,282 for non-infrastructure projects in this first funding cycle. The maximum funding for any project could not exceed \$250,000 for infrastructure and \$50,000 for non-infrastructure activities for a total maximum of \$300,000 per project. All SRTS construction projects are advertised and bid by the Department, and engineering firms are advertised and selected by the Department.

NEW YORK

New York's 2005-2009 SRTS federal funding total: \$31,646,277.

The New York State Department of Transportation SRTS deadline for applications ended on April 1, 2008. On September 8th 2008, the Department announced \$27 million in grant awards for 70 infrastructure projects across the state impacting more than 181 schools to help students walk and bicycle safely. Meeting federal guidelines, 90 percent was allocated for infrastructure and 10 percent for non-infrastructure. Under New York State's SRTS program, the maximum project cost for non-infrastructure projects is \$150,000 and for infrastructure projects it is \$400,000. New York City's Department of Transportation was awarded \$3,500,000 in infrastructure funding to complete traffic safety improvements at 135 New York City schools with the highest pedestrian accident rates. This amount of SRTS funding corresponds to the City's percentage of the state's student population (12.5 percent). New York City provides its own non-infrastructure funding.

OKLAHOMA

Oklahoma's 2005-2009 SRTS federal funding total: \$7,089,250.

The first application cycle for SRTS funding ended on June 12, 2008. ODOT received 38 applications requesting a total of \$6,500,000 in infrastructure projects and \$197,000 in non-infrastructure projects. A total of \$3,000,000 was awarded for the 2008 cycle in September 2008. In December 2008, the selected projects will be submitted to the Oklahoma Transportation Commission for final approval. In February 2009, contracts will be executed and a Notice to Proceed will be issued. The final application cycle will begin in January 2009.

TEXAS

Texas' 2005-2009 SRTS federal funding total: \$44,684,980.

The Texas Department of Transportation's first call for project proposals ended in May 2007 and projects were awarded September 27, 2007. The Texas Transportation Commission approved approximately \$24,700,000 in awards that will reach 66 communities with 244 projects. TxDOT received 360 SRTS applications requesting a total of approximately \$69,000,000. The non-infrastructure and infrastructure applications require that a Safe Routes to School Plan be submitted for consideration of funding. TxDOT plans to announce a call for non-infrastructure statewide services projects in spring 2009. No date has been set for other types of projects.

VIRGINIA

Virginia's 2005-2009 SRTS federal funding total: \$13,329,111.

Applications are due to the Virginia Department of Transportation in December 2008 for the third round of funding. Virginia completed its second call for applications in June 2007. Grant awards were announced in May 2008. VDOT has developed two types of awards—program and project grants. Program grants are used to develop documented SRTS plans and programs. Project grants provide infrastructure improvements within a two-mile radius of targeted schools. An approved SRTS plan must be in place and documented before an applicant is eligible to apply for project grants.

ILLINOIS: Traffic Safety Near Schools

Featured Community: Champaign-Urbana;
southern Illinois

Total federal SRTS award: \$85,000 in infrastructure funding and \$25,500 in non-infrastructure funding

Other project funding: \$61,000 from the City of Urbana

Stakeholders and responsible agency(s): City of Urbana Public Works Department; Champaign-Urbana SRTS Project; Urbana School District; Champaign County Regional Planning Commission; Champaign-Urbana Mass Transit District; SRTS National Partnership; community child safety advocates; and local elected officials.

Timeline for completion: spring 2007 – spring 2009

Background

The Champaign-Urbana Safe Routes to School (C-U SRTS) Project came about after local champions spent four years building community support by organizing annual Walk and Bike to School Day events in Champaign, and realized that much more could be done to educate the Champaign-Urbana community on pedestrian and bicycle safety issues. The C-U SRTS Project applied for and was awarded \$25,500 in SRTS federal funding from the Illinois Department of Transportation to train school and community audiences about SRTS. Elements of the grant include: educating school personnel, parents and students on the value of walking and bicycling to school to improve health and increase physical activity; increasing visibility of law enforcement in school zones through programs such as school zone enforcement campaigns; increasing public awareness of school zones through media campaigns; and creation of walking and bicycling to school encouragement programs such as the Walking School Bus.

During the summer and fall of 2008 educational activities included open houses at elementary schools where safety information was given to parents including instructions on how to request adult crossing guards for their schools. In addition, new traffic patterns were presented to the parents and families to improve safety during arrival and departure periods. Other activities included Market at the Square – a traffic safety game, C-U bicycle maps, a bicycle rodeo, and bicycle helmets fitted and given away. The C-U SRTS Project also hosted Walk and Bike to School Day at 12 elementary schools, handed out safety



This sign will be replaced by a new 'School Zone' sign

information to more than 4,000 families, and presented at the University of Illinois Health and Wellness Showcase. The C-U SRTS Project will apply for continued funding for community education and enforcement programs based on the success of current outreach activities.

Infrastructure Projects

In 2007 the City of Urbana received \$85,000 in Safe Routes to School funding to install new school zone signage at seven elementary and middle schools in the City of Urbana. Currently, the placement and condition of many of the existing school zone signs do not meet federal standards, and the location and types of school zone signs are inconsistent from one school zone to the next. Additionally, speeding vehicles are a problem at schools located on major streets.

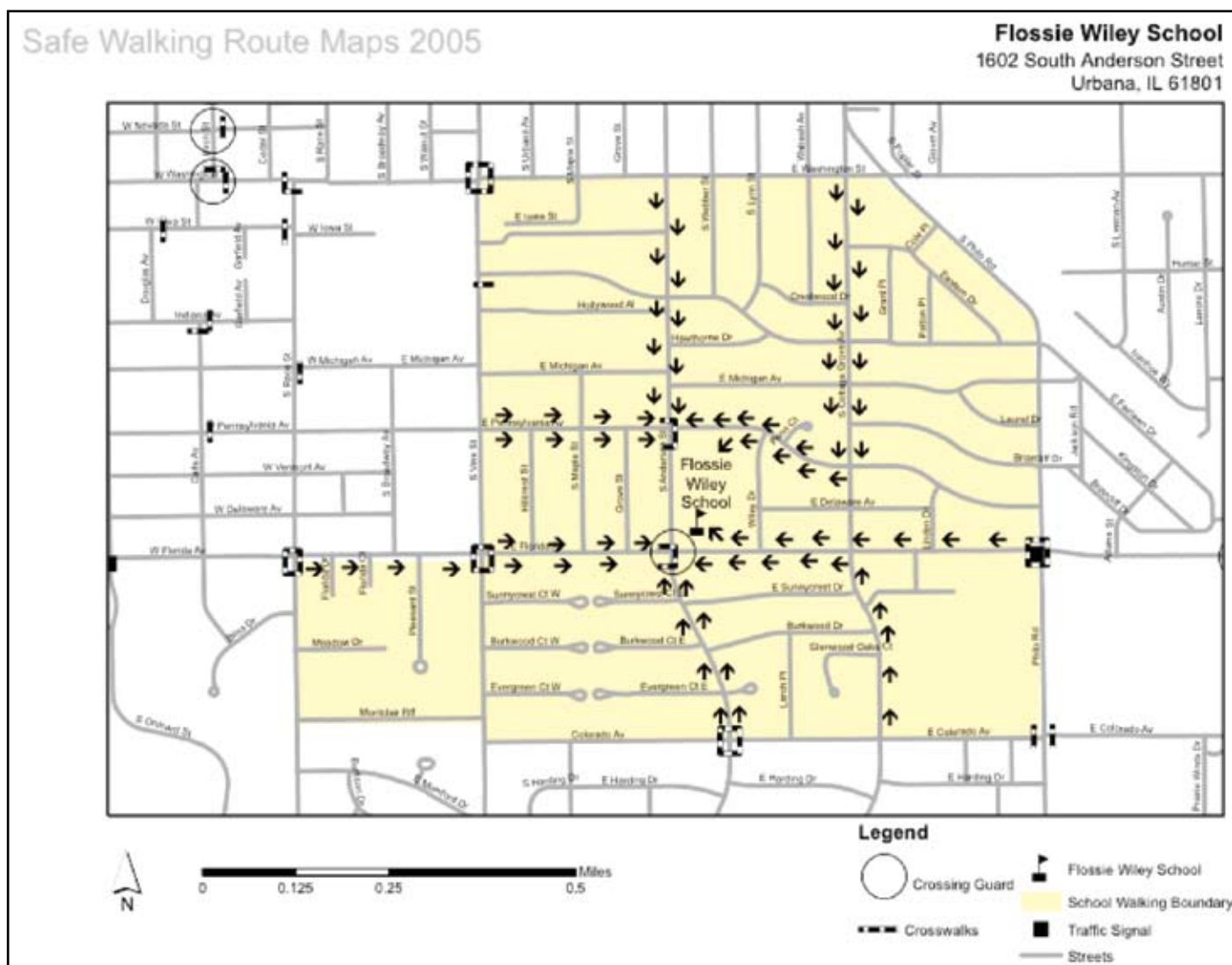
With this funding, the City of Urbana will be able to bring all school zone signage throughout the city into federal standards and will also be able to rearrange the signs so that they are consistently placed in every school zone, which will create a safer environment for students. All new signs will be fluorescent yellow green for increased visibility to improve drivers' awareness about entering a school zone. The signs are scheduled to be installed in late fall 2008 or early spring 2009.

Leveraging Resources

During the summer of 2008, the Urbana Public Works Operations Division made improvements around the various schools in the city to make it safer for kids to walk and bicycle to school. All school crosswalks were repainted by the city paint crew to make them as visible as possible, using the city's general funds. Crosswalks are provided at every intersection immediately

adjacent to school grounds and at all locations at which a crossing guard is present.

In 2005, the city created maps for seven public elementary and middle schools in Champaign-Urbana. These Safe Walking Route Maps show students, parents, and school personnel where the safest routes are in terms of sidewalks, crosswalks, crossing guards, and traffic signals and signs.





LOUISIANA: Rebuilding a Neighborhood

Drew Elementary School (K-8);
New Orleans, Louisiana

Total federal SRTS award: \$250,000 in infrastructure funding and \$50,000 in non-infrastructure funding; approved in April 2008

Other project funding: \$112,530

Stakeholders and responsible agency(s): City of New Orleans-Department of Public Works; Louisiana Public Health Institute; SRTS National Partnership; Recovery School District; and Tulane University School of Public Health and Tropical Medicine.

Timeline for completion: Spring 2008 – Summer 2010

Background

Dr. Charles R. Drew Elementary School, a 600-student campus located in the Bywater neighborhood of New Orleans, sustained significant flooding and damage in 2005 from Hurricane Katrina, and as a result, the students and staff were displaced for well over a year. The school struggled to rebuild, and finally re-opened their doors in October 2006. It was the first school in the hurricane impact zone to reopen, and as of fall 2008 remains the only open elementary school in the Bywater area. The majority of Drew's students are living below the poverty line. Opportunities for physical activity have been limited at the school, but in May 2008, "Live with Regis and Kathy", along with Disney/ABC Domestic Television, and Kaboom!, funded and installed a new school and community play structure and playground area on the school campus.

Drew began its Safe Routes to School program in spring 2008 through a partnership between Tulane University's School of Public Health and Tropical Medicine, the Louisiana Public Health Institute, and the Safe Routes to School National Partnership.

Drew Elementary School is in the Recovery School District, which was created by state legislation in November 2005 to allow the state to take over schools that fell into a "worst-performing" metric. The Department of Education-run District serves 35 percent of New Orleans students at 25 public and charter schools.

Drew Elementary is situated on State Highway 46, which creates a physical barrier from the neighborhood due to high traffic volumes and speeds.



Speed limit sign near Drew Elementary

Infrastructure Projects

Tulane University, the Louisiana Public Health Institute and the SRTS National Partnership collaborated with the Recovery School District and City of New Orleans Department of Public Works to apply for federal SRTS funds from the State of Louisiana. The application was approved in April 2008, and Drew was awarded \$250,000 in federal SRTS infrastructure funding, administered by the Louisiana Department of Transportation and Development. The funds are programmed to improve intersection safety, signalization, sidewalk conditions, and traffic flow within a one-mile radius of the school, and to purchase and install bicycle-parking racks on school grounds; the project is expected to be completed in 2010. Drew is the only school in the New Orleans area to apply for and receive federal SRTS funds thus far.

Drew also received \$50,000 in non-infrastructure SRTS funding, and is also receiving some technical assistance from the SRTS National Partnership through its State Network Project. Unfortunately, the SRTS program at Drew has experienced program delays due to principal turnover at the school, and difficulties with administrative challenges caused by the reimbursement aspect of the federal funds. It has been difficult for the Recovery School District to fund non-infrastructure programs in advance, due to a lack of financial resources post-Katrina.

Leveraging Resources

Community support for bicycle and pedestrian improvements has been communicated through numerous post-Hurricane Katrina rebuilding plans. The state highway on which Drew



Elementary School is located received a new asphalt overlay in spring 2008. Approximately 80 miles of urban arterial and collector roadways in Orleans Parish are being rehabilitated due to the effects of Hurricane Katrina and subsequent flooding. The Safe Routes to School National Partnership and Louisiana Public Health Institute, as part of their collaborative effort to advocate for the adoption of complete streets as a policy in New Orleans, worked with the New Orleans Regional Planning Commission, Department of Public Works and Louisiana Department of Transportation and Development to secure funding for and to

install bike lanes and high-profile crosswalks, and to upgrade curb ramps on these roadways, including along the newly-paved state highway. The State Highway 46 project was completed in July 2008 at a cost of approximately \$93,630 for bike lanes and crosswalks, and \$18,900 for 42 curb ramp upgrades, funded through the state highway maintenance fund. The bike lanes on St. Claude Avenue (State Highway 46) were the first bike lanes to be installed in the City of New Orleans. The State of Louisiana has now incorporated the new bicycle lanes and crosswalks into its standard operating procedure for the highway.



New Orleans first-ever bike lane leads to Drew Elementary



NEW YORK: Revitalizing a School and Its Neighborhood

Featured School: Hamlin Park School #74 in Buffalo's Hamlin Park Historic District

Total federal SRTS award: \$550,000 in infrastructure funding announced in September 2008

Other project funding: City of Buffalo \$1,000,000; Re-Tree Western New York \$60,000; New York State Department of Transportation \$1,792,000.

Stakeholders and responsible agency(s): City of Buffalo; Buffalo Public Schools; Hamlin Park Taxpayers Association; Green Options Buffalo; and SRTS National Partnership.

Timeline for completion: July 2008 - October 2010

Background

The Hamlin Park community is located within the City of Buffalo. This low-income community was developed in the early 1900's and has a well-established street grid and plentiful sidewalks. It has a low crime rate, mostly occupied buildings, connections to the metro rail and bus routes, and successful business districts.

The implementation of Safe Routes to School is considered an important aspect of building "quality of life" for students, as demonstrated by publicly announced commitments made by the Buffalo Public School District Superintendent and the City's Mayor. Local advocates were able to inspire this commitment by promoting the use of SRTS as a community revitalization tool. Hamlin Park School was selected as Buffalo's SRTS pilot program through a city-wide process developed through the Joint Schools Construction Project, represented by a committee that includes the City of Buffalo's Office of Strategic Planning (OSP), Department of Public Works (DPW) and Buffalo Public Schools (BPS). The committee is facilitating the restoration of all schools within the city and is coordinating planning efforts around the schools. The key objective of this committee has been to strengthen the neighborhoods adjacent to schools, including the implementation of a SRTS program. The Joint Schools Reconstruction Project is entering phase II of a \$1 billion investment in the rehabilitation of Buffalo's historic neighborhood schools, which has been considered a centerpiece to the rehabilitation of its communities.

The Hamlin Park community is also part of the "Neighborhood of Choice" program. This program was established by the City of Buffalo to facilitate the revitalization of the Hamlin



Walking to Hamlin Park School

Park community. The city committed over \$3,000,000 to implement several key strategies, including the enhancement of infrastructure and streetscape improvements throughout Hamlin Park, which includes \$1,000,000 for streets, curbs, sidewalks, signage, street furniture, trees, and greenery around the Hamlin Park School, in addition to \$550,000 awarded by New York State for the school's SRTS program.

Safe Routes to School in the City of Buffalo encompasses the 5ES for SRTS: engineering, education, encouragement, enforcement and evaluation. In addition to collecting survey data from parents and students, the New York State Partnership for Walk Our Children to School implemented the Safe Routes to School National Course, a training course that permitted the community to focus on developing their SRTS program and priorities. The Hamlin Park Taxpayers Association is the lead neighborhood group and has initiated a SRTS committee to carry the program forward.

Infrastructure Projects

The federally-funded SRTS infrastructure project for Hamlin Park School is comprehensive and takes into account the needs of the residents. Through a SRTS community workshop, community members voiced their desire to make the community safer, which includes ADA (Americans with Disabilities Act) compliant intersections, trees, better traffic signage, pedestrian-scale lighting and improved sidewalks. In order to determine how to best use the new federal infrastructure funding, local agencies and community partners came together to learn what was already funded and scheduled for the neighborhood. For example, the New York State Department of Transportation will be financing



the rehabilitation of the current pedestrian bridge over the Kensington Expressway that connects to the Hamlin Park School, and 200 trees are being planted throughout the neighborhood as a part of the Neighborhood of Choice project on the two main routes that lead to the school.

Infrastructure dollars in the SRTS application will be spent specifically for the complete reconstruction of three main intersections. They were identified due to their high risk of crashes along the main route to Hamlin Park School; two are intersections on arterials that need major upgrades leading to the school and the third is an intersection considered a safety hazard by the neighborhood. These three intersections will receive new curb ramps, marked crosswalks with enhanced treatments, pedestrian-scale lighting, curb extensions, new signage, and pedestrian countdown timers.

Leveraging Resources

Hamlin Park School has an enrollment of 424 students, however only 84 of them live within a half mile of the school due to the

school districts' school of choice plan, which allows parents to select any school within the city for their child to attend. On average, 13 percent of Hamlin Park School students walk to school, 10 percent are driven to school by a parent, and 76 percent ride a school bus. However, within a half-mile radius of the Hamlin Park School there are 781 students that attend seven other elementary schools. So despite the focus of the SRTS pilot program at Hamlin Park School, the impact of the program will extend far beyond the current school population to other students in the neighborhood.

Thus, by leveraging the resources of the SRTS award, advocates have raised the awareness of the local decision makers to use SRTS as a community revitalization tool. There is now talk of restructuring Hamlin Park as a neighborhood school, and to utilize it as a pilot for the reintroduction of neighborhood schools in the City of Buffalo. One of the main impetuses for this is the cost savings gained by reducing busing, which has become an even greater financial burden for the school district due to the increase in fuel prices.





VIRGINIA: Making Walking and Bicycling Safer

Featured Schools: Charles Barrett and George Mason Elementary schools, and 11 other schools in Alexandria, Virginia.

Total federal SRTS award: \$517,000

Other project funding: \$1,872,420

Stakeholders and responsible agency(s): City of Alexandria; Alexandria City Public Schools; SRTS National Partnership; Trips for Kids-Metro DC; various PTA's and civic associations.

Timeline for completion: December 2006 – November 2010

Background

Because of high-profile crashes that had occurred previously in Alexandria, and the circumstances surrounding these incidents, there is a perception among parents, teachers and school administrators in Alexandria, Virginia that traffic congestion, traffic volume and driving speeds near schools create unsafe conditions for bicycling and walking. In response, several city departments and Alexandria City Public Schools collaborated on a two-month series of walking audits in 2003 to determine the “walkability” of each of the thirteen elementary and middle schools in Alexandria. This initiative resulted in 118 separate walking audits with at least one audit in the morning and afternoon at each of the schools.

The Alexandria Safe Routes to School: Walking audit report and community perspective report provided a detailed Safe Routes to School plan for each Alexandria school and identified acceptable walking and bicycle routes within one-half mile of every school. The audit used a national walkability tool to identify infrastructure that is supportive to walking and bicycling, and also included a citizen-led engineering assessment of traffic risks facing children, which was based on an extensive database of all reported pedestrian or bicyclist accidents from 2004-2006. In addition, the report also identified recommendations for numerous safety improvement projects.

Two separate planning initiatives also took place to improve the city's infrastructure for pedestrians and bicyclists and to address Safe Routes to School. A June 2008 Transportation Master Plan revision now includes sections dedicated to bicyclists and pedestrians, and outlines key missing links and infrastructure improvements needed throughout the school division. And the



citywide Pedestrian and Bicycle Mobility Plan outlines a priority list and blueprint for pedestrian, bicycle and Safe Routes to School infrastructure improvements based on existing level of service and usage predictions. These infrastructure improvements were proposed for schools that plan to participate in SRTS non-infrastructure programs and will help the schools take a comprehensive approach to encouraging walking and bicycling.

Infrastructure Projects

The safety improvement projects that will be completed with the more than \$2,000,000 in funding include:

Charles Barrett Elementary: Construction will remove significant obstacles to crossing the street within one-quarter mile of the school entrance, including the lack of a sidewalk, poor intersection geometry and lack of adequate pedestrian facilities at the primary school entrance.

George Mason Elementary: The skewed intersection of Cameron Mills/Summit/Monticello adjacent to the school campus has large crossing distances. The city will reduce the roadway width and reconfigure the intersection to better align the cross streets and shorten pedestrian crossings. Additionally, five-foot bicycle lanes will be added to Monticello Road. These improvements will also provide a traffic calming element to Monticello, which is adjacent to the school.

Multiple locations: At numerous elementary and middle schools – approximately 15 locations – the city will install pedestrian countdown signals to assist crossing guards and students. The city will also provide safer street crossings to enable children to safely reach monitored crossings within one-quarter mile of schools. These locations are targeted at schools engaged



in SRTS program activities or in areas with high concentrations of pedestrian and/or bicycle crashes.

Bicycle Facilities: Only half of these Alexandria schools currently have bicycle parking spaces identified and many of the existing bicycle racks are broken and poorly located. The city will provide bicycle parking access to 7,374 students enrolled at the 13 schools. New “inverted U” racks or free standing “bike circles” are planned for locations that will provide students with safety and security and also some protection from the elements. The cost for this project is estimated at \$36,400 for materials and installation.

Administrators, teachers and parent volunteers will also develop school-based non-infrastructure programs that have the best chance of increasing the number of students who walk or bicycle to school. Programs will include: Parental Awareness Campaigns, Safety Patrols, In-School Safety Education, Walk Pools, and encouragement initiatives such as “Walking Wednesdays”, “Fitness Fridays” and “Walk Across America”.

Leveraging Resources

Since 1970, the City of Alexandria’s policy has been to construct sidewalks, on at least one side of the street, within 1,000 feet of schools, and along major arterial roadways. The city allocates \$100,000 annually to this effort. At Charles Barrett Elementary School, the city is now constructing 400 linear feet of sidewalk to close a gap in the sidewalk network at the intersection of Tennessee Avenue and Valley Drive. This important gap closure is estimated at \$22,420 and will provide a major SRTS safety

improvement. This project was completed through the city’s capital improvement program in March 2007. Additionally, the city annually allocates money to traffic control facilities and neighborhood traffic calming. These funding resources are being made available to augment the city’s SRTS projects. The approved FY 2007 Capital Improvement Program budget for these programs includes:

Traffic Control Facilities: \$850,000 from FY07-12 including: \$50,000 per year for installation of multi-sensory signals for pedestrians with low vision or hearing impairments; \$71,000 per year for new pedestrian signals; and \$45,000 for new school flashers and a central operation control system.

Neighborhood Traffic Calming: \$600,000 from FY07-12: to design traffic calming measures within the right-of-way to preserve neighborhoods, divert cut-through traffic, lower traffic speeds, and highlight pedestrian crossing areas. The city will also use the funding to construct physical measures such as speed cushions, raised intersections, and center island narrowing; and

Safe Routes to School: \$300,000 from FY 08-13

In addition to the funds already allocated for SRTS and related purposes that improve pedestrian and bicycle safety, the Alexandria City Council is considering a request to add \$50,000 each year in its six-year Capital Improvement Project (FY 08-13) budget for Safe Routes to School.





As demonstrated through the 10 state profiles and four local case studies, the federal Safe Routes to School program is serving to make big changes to the built environment that will improve walkability and bikeability, providing improved safety and opportunities for physical activity for children. And as is evidenced by a 2007 CDC study, SRTS improvements not only benefit physical activity in children, but also benefit adults.

The case studies highlighted from New Orleans, Buffalo and Alexandria, show that SRTS can also serve as a catalyst for creating complete streets, as well as city-wide efforts to increase the livability of the whole community.

State Level Implementation Challenges

Despite the successes that SRTS brings, there are challenges for implementing the program, largely because it is funded with federal funds that have extensive regulatory requirements. One of the biggest challenges for states and local jurisdictions is compliance with Title 23, a complex federal statute for which state implementation varies widely. In fact, some states are adding their own regulations to the already challenging Title 23 burdens, causing further delays, additional costs and other difficulties. Below are some of the most common issues reported with regard to Title 23 and implementation of the federal SRTS program:

- * **Deterring applicants:** Some states report that many interested schools and local municipalities are not applying for SRTS funding because of the federal and state regulations. Some grantees have even returned their grants once they more fully understood the regulatory requirements and the costs and time involved in completing the paperwork.
- * **Causing delays in projects:** Very few federal SRTS infrastructure projects have broken ground around the country due to the amount of effort and time it takes to ensure compliance with the various regulations. And in some States, localities that have existing contractors who do a variety of projects aren't allowed to use them at all, or they must go through a competitive bidding process.
- * **Deterring low-income schools from participating:** Low-income schools have a harder time participating because they often do not have engineering resources at the city/county level to draw upon, they generally don't have staff to manage the regulatory compliance paperwork, and they are unable to front



the funding to make physical improvements while waiting to be reimbursed by the state.

- * **Dampening the impact of SRTS:** As SRTS is so often driven by local advocates, teachers, and parent volunteers, enthusiasm can be hard to maintain during lengthy administrative delays.

State Level Implementation Successes

There is general support for the intent of the Title 23 regulations, for example to make sure that projects are not adversely affecting the environment and ensuring that fair labor practices are in place. Solutions to the administrative challenges should not undercut these considerations, while ensuring that the process is simplified and expedited. The following are solutions that some states have implemented:

- * **Categorical Exclusions:** Based on existing regulations, the majority of bicycle and pedestrian projects qualify for categorical exclusions for NEPA (the federal environmental review process), so that they do not have to go through the entire NEPA process. However, the categorical exclusions process in many states still requires lengthy forms and waiting periods.
- * **Bundling:** SRTS infrastructure projects must be programmed into state and regional transportation plans. However, as most are small projects, they are not considered to be "regionally significant" and so some states are allowing the projects to be bundled together into a SRTS line item.
- * **Statewide Contractor:** Some states have selected contractors to carry out the implementation of infrastructure projects. These contractors are then responsible for managing the



Title 23 compliance, and absorbing the costs of the projects prior to reimbursement. This has worked in some small states, but could be challenging for larger states and for communities that want to retain local control over the planning and design of their projects.

Securing More Improvements to the Built Environment

State Advisory Committees: State SRTS Advisory Committees that include stakeholders from various agencies and nonprofits are valuable assets in ensuring the quality of SRTS infrastructure projects. What follows are some policies that SRTS Advisory Committees can recommend:

- * **Complete Streets:** States that implement complete streets policies are creating safe access to local streets for pedestrians and bicyclists by requiring that the planning, design, construction and maintenance of all roadways serves all transportation users.
- * **Strategic Highway Safety Plan:** This federally-funded process can generate funding for SRTS projects and activities in states that include a bicycling and walking emphasis area in their Plan.
- * **Traffic Fines:** In some states and local communities, traffic violations can generate funds that can be designated for traffic safety improvements in school zones, including SRTS infrastructure projects and program activities.

Local Level Implementation Challenges

Community and school district support is necessary before applying for state SRTS funds, and before projects and programs can be implemented. Local SRTS leaders need to plan their programs and community expectations to take into account the two to four years it may take to get infrastructure projects funded, designed, approved and installed. Unless there is a statewide contract in place, local agencies or organizations must also pay for the projects and programs up-front, and then apply for reimbursement from the State Department of Transportation, in a manner depending on the structure of the state's SRTS program. Engineers and program leaders need to respond to multiple, complex federal and state regulatory requirements throughout the process.

Local Level Best Practices

The best results are seen in the implementation of SRTS programs when the local community organizes a diverse SRTS

school team involving a city or county engineer, public works official, community police officer, school staff and students, local advocates, and bicycle and pedestrian experts. The team can plan for non-infrastructure activities and conduct a school-area walkabout to determine the best walking and bicycling routes from nearby residential areas to the school. This process can also result in a list of engineering improvements needed to make those routes walkable and bikeable. Throughout this process it's important to get feedback on the proposed projects from the local community, and to ensure that the infrastructure projects are part of a comprehensive "5Es" program (engineering, encouragement, education, enforcement and evaluation).

Community-wide SRTS task forces present the opportunity to develop city-wide SRTS travel plans. Task forces generally encompass multiple schools and could present an opportunity to leverage local funding or administrative assistance by being part of a larger effort.

Developing a relationship with the state SRTS coordinator, who is there to help interested communities, and following the state SRTS application guidelines closely, are also important to ensuring success at the local level. Many states will automatically toss out an application that isn't complete. Securing community support and developing an overall 5Es plan for SRTS will also generally make an application for funding more competitive and easier for the state's decision-making process.

Safe Routes to School Improves the Built Environment

Despite the challenges that states and local champions face in implementing SRTS programs and projects, the 10 states profiles and four local case studies featured in this report demonstrate the potential of SRTS to improve the walkability and bikeability of communities around schools. The federal SRTS program is the first national program of its kind in the U.S., and it is to be expected that there will be growing pains. But the clear need for improvements to the built environment has motivated local advocates and agencies to take the necessary steps to launch SRTS programs and apply for funding. As has been demonstrated by SRTS programs that started years before, the federal program will make important changes to the built environment, improving the ability for active living among children as well as other members of the community.



Prepared by the Safe Routes to School National Partnership for the Centers for Disease Control and Prevention by Robert Ping (Author, State Network Manager), with editing by Deb Hubsmith (Director). Design by Melanie Scheuermann, www.melcreative.com.

www.saferoutespartnership.org

